

## **Abstract**

The present invention relates to a method for providing real-time broadcast service in a mobile communication system, which is especially adapted to provide real-time broadcast service in the 3<sup>rd</sup> generation Code Division Multiple Access (CDMA) mobile communication system. The method comprises: adding a broadcast service hierarchy for specially providing real-time broadcast service in an radio access network having an original service hierarchy for providing voice communication; real-time broadcasting the real-time broadcast service which is accessed to the mobile communication network to mobile terminals via air interface of the mobile communication network through setting special broadcast resources, namely special carriers or special scrambling codes; the mobile terminal working in either of an original service hierarchy mode and a broadcasting service hierarchy mode which can be switched with each other. When the special carriers are adopted, only independent down-link carrier frequency is set in the broadcast service hierarchy, the mobile terminal solely controls the cell switching when moving among cells and monitors the paging procedure. When the special scrambling codes are adopted, the down-link scrambling codes of original service hierarchy and the newly added down-link special scrambling codes are utilized in each cell of both the original service hierarchy and the broadcast service hierarchy.